SUPPLEMENTAL RESPONSE

In response to Notice of Non-Compliant Amendment mailed 5/28/2003, please further amend the above identified application.

Please amend the Abstract as follows:

ABSTRACT

An improved centrifugal impeller having between 20 and 26 rearwardly curved blades ~~blades~~, a ratio of blade annulus width to wheel radius between 0.31 and 0.37, and an inlet blade angle in the range 32° to 36° and a discharge blade angle in the range 36° to 40°.

CLAIM 1 (currently amended)

An improved centrifugal impeller for use in low profile heat sinks ~~and the like~~ having a multiplicity of small upright spaced apart heat dissipating elements in an array defining a multiplicity of small airflow passageways therebetween with a cavity located centrally therewithin, the impeller being adapted to be disposed adjacent to and about the array of heat dissipating elements and to be driven by an electric motor disposed in the central cavity, and the impeller being open radially inwardly for radial communication with the air flow passageways between the heat dissipating elements and at least partially open radially outwardly for the discharge of spent cooling air, the impeller also having a radially extending backplate which is exposed upwardly and which defines an inlet opening for the axial downward flow of cooling air, and a plurality of rearwardly curved air moving blades forming a part of the impeller and serving to effect a right angle turn in air flow direction and to withdraw air radially outwardly from the passageways between the heat dissipating elements and direct the same radially outwardly.

CLAIM 2 (currently amended)

~~An improved centrifugal impeller as set forth in claim 1 wherein the ratio of the radial dimension W to the overall radius R of the impeller falls in the range 0.25 to 0.5.~~

An improved centrifugal impeller as set forth in claim 1 wherein the ratio of the radial dimension W measured between the leading and trailing edges of the blades to the overall radius R of the impeller falls in the range 0.25 to 0.5

CLAIM 3 (original)

An improved centrifugal impeller as set forth in claim 1 wherein the ratio of radial dimension W to the overall radius R of the impeller falls in the range 0.31 to 0.37.

CLAIM 4 (currently amended)

An improved centrifugal impeller as set forth in claim ~~1~~ 2 wherein the impeller has between 20 and 26 blades.

CLAIM 5 (original)

An improved centrifugal impeller as set forth in claim 4 wherein the ratio of radial dimension W to the overall radius R of the impeller falls in the range 0.31 to 0.37.

CLAIM 6 (original)

An improved centrifugal impeller as set forth in claim 1 wherein the impeller blades each have an inlet angle in the range or 28° to 40° measured between a line tangent to a circle intersecting the inner blade edges and a line tangent to the blade centerline at its leading edge.

CLAIM 7 (original)

An improved centrifugal impeller as set forth in claim 1 wherein the impeller blades each have an inlet angle in the range of 32° to 36° measured between a line tangent to a circle intersecting the inner blade edges and a line tangent to the blade centerline at its leading edge.

CLAIM 8 (original)

An improved centrifugal impeller as set forth in claim 1 wherein the impeller blades each have a discharge angle in the range of 32° to 44° measured between a line tangent to the impeller periphery and a line tangent to the blade centerline at its trailing edge.

CLAIM 9 (original)

An improved centrifugal impeller as set forth in claim 1 wherein the impeller blades each have a discharge angle in the range of 36° to 40° measured between a line tangent to the impeller periphery and a line tangent to the blade centerline at its trailing edge.

CLAIM 10 (currently amended)

An improved centrifugal impeller as set forth in claim ~~1~~ 2 wherein the ratio of the impeller radial dimension W to the impeller overall radius R falls in the range 0.31 to 0.37, wherein the impeller has between 20 and 26 blades, wherein the impeller blades each have an inlet angle in the range of 32° to 36° measured between a line tangent to a circle intersecting the inner blade edges and a line tangent to the blade centerline at its leading edge, and wherein the impeller blades each have a discharge angle in the range 36° to 40° measured between a line tangent to the impeller periphery and a line tangent to the blade centerline at its trailing edge.

CLAIM 11 (new – currently amended)

An improved centrifugal impeller for use in low profile heat sinks having a multiplicity of small upright spaced apart heat dissipating elements in an array defining a multiplicity of small airflow passageways therebetween with a cavity located centrally therewithin, the impeller being adapted to be disposed adjacent to and about the array of

heat dissipating elements and to be driven by an electric motor disposed in the central cavity, and the impeller being open radially inwardly for radial communication with the air flow passageways between the heat dissipating elements and at least partially open radially outwardly for the discharge of spent cooling air, the impeller also having a radially extending backplate which defines an inlet opening for the axial flow of cooling air, and a plurality of 20 to 26 rearwardly curved air moving blades forming a part of the impeller and having their leading edges spaced substantially radially outwardly from the backplate inlet opening, the blades serving to effect a right angle turn in air flow direction and to withdraw air radially outwardly through the passageways between the heat dissipating elements and direct the same radially outwardly.

CLAIM 12 (new – currently amended)

An improved centrifugal impeller for use in low profile heat sinks having a multiplicity of small upright spaced apart heat dissipating elements in an array defining a multiplicity of small airflow passageways therebetween with a cavity located centrally therewithin, the impeller being adapted to be disposed adjacent to and about the array of heat dissipating elements and to be driven by electric motor disposed in the central cavity, and the impeller being open radially inwardly for radial communication with the air flow passageways between the heat dissipating elements and at least partially open radially outwardly for the discharge of spent cooling air, the impeller also having a radially extending backplate which defines an inlet opening for the axial flow of cooling air and a plurality of rearwardly curved air moving blades forming a part of the impeller and having their leading edges spaced substantially radially outwardly from the backplate inlet opening, the blades serving to effect a right angle turn in air flow direction and to withdraw air radially outwardly through the passageways between the heat dissipating elements and direct the same radially outwardly, wherein the impeller blades each have an inlet angle in the range of 28° to 40° measured between a line tangent to a